

AN ASSESSMENT OF READING RESEARCH: TEACHING CHILDREN TO READ

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Please note: The first portion of the seminar was not recorded.

MS. CHHABRA: -- formed. The process that they went through and their findings and determinations, and finally where we are today and what we are going to do with the findings that you all will see in the book in front of you.

A lot of people often wonder what the National Reading Panel has to do with NIH. NIH is a leader in cancer research and biomedical research but what a lot of people do not know is that the National Institute of Child Health and Human Development has done a lot of work in reading research for the past several years. They have done a lot of work in intervention studies. They have worked a lot with different programs, even in the D.C. area, in Texas, in Connecticut, and most recently they are responsible for doing quite a number of neuroimaging studies, where they evaluate and look at brain activity in relation to reading ability.

So it seemed natural for Congress when they said, "We want to put together a panel. We want to respond to our constituents, to our parents and to our teachers who are constantly asking us what is the best way to teach kids how to read. There are all these fads that come through. There are all these different programs that teachers are bombarded with, and how can they know what is the best program?"

So Congress asked the National Institute of Child Health and Human Development, in collaboration with the Department of Education, to convene a panel, a panel of 14 people that would look at the effectiveness of reading research and the way that it can be incorporated into the classroom. Congress had specific ideas about what they wanted the panel to accomplish.

They wanted them to assess the status of research-based knowledge on reading. They wanted the panel to be able to say, "Here are the programs that work, and this is what teachers can use in the classroom."

They wanted the panel to be able to develop a strategy of taking these findings and getting them out to parents, to teachers, to that small school district in Wisconsin that really needs that information, and to be able to do it in a way that it is going to be accessible, not in a way that uses very technical terms. What is the best way we can get them out so people will understand the information?

And, finally, they wanted to be able to say what additional research the panel needs to highlight for other people to work on. We have so much research out there, but what is the good research, what is it that we need to work on?

So then NICHD and the Department of Education tried to figure out how they were going to pick these panel members. They looked at over 350 nominations from different groups all over the country, and they chose parents and grandparents, teachers, and professors of education and psychology, and several of the professors actually had been teachers themselves. They knew a lot about the reading research, but they knew about it from their own work when they were a teacher. We also had a pediatrician and a school principal.

The interesting thing about the parents that were involved was that these were parents that had sat with their child who did not know how to read, or they were up with them until 1:00 o'clock in the morning frustrated, thinking, "What is the best way to teach my kid how to read? I do not understand what the school is telling me; I do not understand this program." Out of frustration, they became very involved in the reading research world.

So here were these members. They had this task in front of them from Congress, and they had to figure out how they were going to get started.

So what they did is they said, "Vinita, can you go and look up some information for us on reading?" We looked at two different databases, and when we put in the term "reading," we came up with over 100,000 research studies that were out there.

Now the panel members were overwhelmed and they said, "How are we possibly going to be able to look at this large number of studies, and how are we going to be able to decipher between one study from another?"

Then they decided they needed to listen to the constituents that had come to Congress. They had to be able to go and talk to these people. So they held regional meetings in major cities including Chicago. They were in Austin, Texas. They were in Mississippi, New York City, and Portland, Oregon. They heard from parents. They heard from teachers. They heard from administrators, and they heard from young children. The common themes that came out were early identification and intervention. We, as teachers, need to be able to collaborate with researchers and understand the information that is coming to us. We, as parents, need to be more informed about what is going on in the schools and what is considered the most appropriate reading method.

The panel members also consulted with several educational organizations, and they also met with different reading groups, including the International Reading Association, to figure out how they would be able to disseminate this information to different groups.

Based on the information that they found, they decided to go on certain topics. They thought that they would look at certain fields of reading that had proved prominent

over several years. There is also a book -- I do not know if many of you are familiar with it -- called Preventing Reading Difficulties in Young Children. It is by the National Research Council, and this was a group of panel members that had come up with a consensus report. They were experts in the field of reading and they said, "These are specific skills that are important to teach kids how to read."

Now, they did not say how we are supposed to teach these skills. They did not look at the reading research as heavily. They relied a lot on their expert opinion. So the panel members said this was a good foundation to use, and they used several of those topic areas, but they also added teacher education and computer technology. Computer technology especially because it is becoming more and more prominent in education.

So the panel had these great topics and they had these great ideas, and now they had to figure out how we were going to go through these hundred thousands of articles. And they came up with a methodology. They looked at the congressional mandate. They looked at what Congress had asked them to do, and Congress said to look at the effectiveness of reading research. Look at what it is that makes these studies work. Look at what it is that these control groups did. Look at what it is that the experimental aspects considered. And they came up with these particular things:

They wanted to make sure that the journal articles that they looked at were in a journal that had been peer-reviewed, that had not been accepted just because it looked good, but that there were several people that agreed that this article should be in that journal.

They wanted to focus in on children's reading development, and that was primarily from the response to the regional meetings.

And they wanted to make sure that they used experimental or quasi-experimental design, and that was because they wanted to measure effectiveness and experimental and quasi-experimental was the best way to do that.

So these are some of the characteristics that they used. They said, "Let's look at experiments that have at least one control group, one contrast group, subject participation that is well defined, and instructional procedures and outcome measures that are included, that were well defined, and procedures for instructional fidelity," meaning that it was continuously updated and monitored and that things were followed according to procedure, and making sure that those were included.

Now if you look at these things, there is one thing that is very interesting about this. A lot of these characters -- actually all of them -- are often used in medical research and that is one thing that the panel members wanted to do.

If you have got something like a cancer patient and a cancer patient is given a certain medication, you are not going to give them that medication unless you know that it has worked before. Has it gone through clinical trials? The patients themselves are going to want to know. Okay. Has this worked? You know, what is the evidence that this has worked for other people? And the panel said, "Why isn't reading looked at that same way? We need to evaluate reading research the way that we evaluate medical research."

So this was the first time in the reading field history that research was evaluated in reading this very way, and it was actually emphasized by the pediatrician that was on the panel.

So what did they find? The panel found that there are certain skills that are essential for a child to learn how to read. They should be taught phonemic awareness skills, phonic skills, being able to read fluently with accuracy, speed and expression, and finally being able to apply reading comprehension strategies not only for understanding but also for having the ability to enjoy to read. Children should not have to read because they have to read. They should be able to want to read. They should be able to say, "Okay, I want to go and get this book and I want to sit down and read for a few hours."

So what I am going to do is actually go over each one of these specific skills, define the terms, and after that also tell you what their findings were within those specific areas.

Phonemic awareness and phonics instruction was put into a group called "alphabetics." Phonemic awareness is defined as the knowledge that spoken words are made up of tiny segments of sounds. Those are called "phonemes." The ability for a child to understand that sounds come from words is an important and integral part to develop reading.

The second step or a step that can be interrelated with phonemic awareness is being able to understand that sounds and letters need to be linked. If children can understand, okay, sounds make up certain words, sounds like "b" means "B" and they can link the sound to the letter, then they can use those letters and put them together to form words.

Now what the panel members found within this area is that systematic and explicit instruction in phonemic awareness caused improvements in children's reading and spelling skills. Integrated, also, with systemic phonics instruction there was a significant result for children in grades K through 6, as well as those children who are having difficulty learning to read.

Meaning sometimes older children, who have often fallen through the cracks, need

to be able to develop these skills. They probably do not need as much time with these skills as younger children by the time they are in seventh or eighth grade if they have difficulty reading. They have mastered the alphabet and they can move on to more complex words. We are talking about people that have severe reading difficulties.

Reading fluency. Fluent readers are able to read orally with speed, accuracy, and proper expression. It is not just okay for a child to be able to understand, okay, let's see, bat, cat, sat. Let's see how they put them into a sentence. Can they read that sentence without having to struggle with each individual word?

There are two specific areas in reading fluency. One called "guided oral reading," which I am sure you have seen if you have watched your child work in a classroom with their teacher, where they read a certain sentence and then the teacher provides feedback on the sentence. But one thing that I think is interesting is it is not just teachers that do that. Parents do that all the time. Kids do that with other kids when they are reading to each other.

And the other area is independent silent reading, where we encourage students to have 30 minutes a day maybe to read on their own. Even at home, you know, they will go home, and they will read a book. They will read by themselves, and find themselves a nice little corner.

Being able to do these things shows that a child is being able to master fluency.

What the panel found specifically within guided oral reading is that guidance from teachers, peers, or parents proved to be significant and have a positive impact on three areas. Word recognition, being able to recognize certain words, being able to read fluently and comprehend what they are reading across a wide range of age levels. Independent silent reading. This was an area that a lot of people were a little shocked by. What the panel members found was really that there was not enough evidence-based research to determine whether reading silently was leading to positive gains. What they did find is that if you read silently, maybe incorporated guided oral reading, that that is very helpful and that that can create a positive impact.

But one of the most interesting things is this finding of not being able to recognize that independent silent reading produces significant effects -- that is where we need more research. That is where research is warranted and that is where research should focus on.

And this also does not mean kids should not read by themselves or go off and read; what they are saying is that the panel needs to focus in -- not the panel but the panel is saying that researchers need to focus in on this area.

Reading comprehension. Comprehension is critically important. We know that there are three specific areas where children can develop their comprehension skills: vocabulary development, text comprehension, and also comprehension strategies in which the teacher is prepared to guide the students as they are reading certain things, what is the main idea, and being able to guide students in specific areas.

So what did the panel find?

They found that vocabulary instruction, text instruction, and teacher preparation led to gains. This was based on the research, and, specifically with the vocabulary, they emphasized that teachers need to focus in on repetition, teaching directly and indirectly, and using computer technology, which is a very new area, and it was interesting that within that area there were some findings.

Within text instruction, what they found is that it is most effective to teach students using different strategies, including summarizing information, asking them to generate specific questions, and also cooperative learning, which is one thing I did not put up here, where students work with each other to be able to understand and comprehend the text.

Finally, teacher preparation is exceptionally important. There are different ways that teachers can use strategies. I do not know whether you maybe heard this as teachers or as parents. It is called the "direct explanation" instruction where teachers explicitly provide feedback to the students.

There is also something called "transactional strategy" instruction. And what that is, is teachers will guide students through a mental process of developing a more -- a higher understanding of what they are comprehending, and this is a skill. And this is a skill that teachers need and that they work very hard at to be able to impact their students.

Teacher education and reading instruction. Sometimes when we went to these different regional meetings, one thing that we heard was that people do not pay attention to teacher education. They are focused so much on the different reading skills that they forget who it is that is teaching those children. And that is what the panel wanted to look at.

They wanted to look at how teachers are taught to teach reading, what the research shows about the effectiveness, and how the research can be applied to improve teacher development.

And what they found was that there were some areas that have been shown to be significant and have a higher student achievement ratio based on teacher preparation.

However, what they really found was a little more bleak and that was that there

was not enough good scientific research that followed teachers, followed teachers on a long-term level while they are in-service and when they leave college and go on to their different teaching institutions, how they respond to teaching. And that is what we need to work on and that is one of the things that the panel members really highlighted.

Another new area was computer technology and reading instruction. Developments in the Internet, we all know that that has become very popular. Now the idea is, what can we do with this computer technology in order to facilitate better teaching of reading?

So the panel wanted to look at this area -- and like I had mentioned before, vocabulary produced significant results when used in computers -- and they also wanted to look at phonemic awareness.

And what did they find?

They found that there were lots of research studies out there but not as many as other areas, and what they did find was very limited. It is a very new field. We know we need to work on that, and it was not really a big surprise to the panel. It just indicated that this was an area of research that we needed to improve upon.

So we have this nice report. We actually have a video to go with it. We have a large 400-page copy of the report. Also, I sent around order forms so you can order these. And the question is, what purpose does it serve? What can we do with this?

And what we found is that it is making the public more aware of what is out there. Parents are now able to be armed with information and say, you know what, I know that this reading program is just a fad. I know that it does not include phonics instruction. I know it does not have a good fluency background. And, oh, I know this program is really good in phonics, but it may not have a comprehension component so I may need to supplement that program.

We are also working on one other thing and that is developing the appreciation for the teacher's role in reading. They have a significant role, and being able to understand that and being able to work with the teachers and having the connection between research and education is extremely important.

So what are our next steps? We are going to talk about disseminating the findings. And since April of 2000, when the panel presented the report to Congress, we have distributed over 21,000 copies of the reports and the video. The video has been very popular. What it does is, it explains each one of the skills and then in addition to that it shows a little demonstration of it actually being used in the classroom.

We have received a wide response from that. We have sent out reports to teachers, to educators, to public libraries, to schools of education, but we need to do a lot more.

What I wanted to do before I talk to you a little bit about what else we need to do, I thought I would show you a clip of the video that is available and just so all you know, this video and these two reports are all available free. Everything that I have given you is free. It is your tax dollars at work, and so if you go ahead and call the 1-800 number, you will be able to get this information.

Generally, you can request more than one of the small book. For the big book, it is also available online. So if you are only interested in fluency, you can download that specific chapter, and the Web site should be on the order form that I gave you.

So I think we are ready to start the video.

[Video presentation.]

MS. CHHABRA: Okay. That is just a small clip of the video and, like I said before, it is available free of charge, so feel free to order that. And they are reproducible. None of this information is copyrighted, so if you want to give it to your neighbor, feel free to do that as well.

Thank you.

Well, Dr. Alexander in the video, he is the director of NICHD, talked about implementing these findings, about getting them to the classroom, and that is where we are right now. There is a lot of federal legislation that is out there that has been mandated through the National Institute for Literacy.

I do not know if any of you are familiar with that group, but they have been charged by Congress to take reading research information and implement it into the classroom, to find out what is the best way to reach teachers, what is the best way to reach parents. So we are working with them right now, along with different educational groups and the Department of Education, to take this big 400-page report and make it into maybe a teacher's guide, then maybe tweak it and make it into a parent's guide.

We all know that everyone is busy and they do not have a lot of time to sit down and read this information, so we are trying to figure out what is the best way to do that.

We spent this summer interviewing teachers, interviewing parents, doing different focus groups across the country to find out what it is that they want, what it is that people would like to see with this report. Just having it available, we do not think that is enough. We need to figure out what we can do to implement the report.

Also, the panel is increasingly trying to make aware that further research is needed. Yes, we have 100,000 research studies out there, but is it enough? No, it is not. Eighty percent of learning disabilities are considered to be a reading disability. That is a large chunk.

We need to be able to have the information accessible to people. Not just any information, but the right information.

And so what I wanted to really just end with is to tell you I think we are all working towards one common goal and I think the National Reading Panel has done one thing, and that is arm us with the information that we need to be able to teach our children to learn to read so that they can eventually read to learn.

That is it. If anybody has any questions, I would be more than happy to answer them. If there are any individual cases, I could answer those separately or I could give you my number and we can talk about it at my office, too.

Go ahead.

(Inaudible—Someone not at a microphone asks a question).

MS. CHHABRA: That means out of 100 percent of learning disabilities -- we have got math disabilities -- primarily 80 percent of that -- of any type of learning disability, if they find out that a child has been diagnosed with a learning disability, [there is an] 80 percent chance that that will be a reading disability.

(Inaudible—Someone not at a microphone asks a question).

MS. CHHABRA: Yes. And that has been found through the NICHD reading research, which is a significant amount.

Another question?

(Inaudible—Someone not at a microphone asks a question).

MS. CHHABRA: And that is a great question and that is one of the things the panel did not address. They focused in on kindergarten through grade 12. They did not focus in on adult literacy because they could not do everything. There are initiatives through the National Institute for Literacy that are currently focusing in on adult literacy, and I would be happy to give you some information on that.

And the other thing is bilingualism. It is a very, very big issue. And why didn't the panel focus in on that? There is an extensive analysis that is just being started through NIH on bilingualism. So the panel decided, okay, we will leave that to them, and we will

just focus in on these areas.

So it is being addressed, but just in a different forum.

(Inaudible—Someone not at a microphone asks a question).

MS. CHHABRA: I am a researcher. I work for the National Reading Panel. I have worked in the public school system as a school psychologist. I have seen both sides. I do not have any formal teaching experience, but I have been involved in the assessment of learning disabilities. I have worked one-on-one with tutoring, but right now my focus is the National Reading Panel and getting the information out to people.

Any other questions?

Well, feel free to take more than one copy of the report, if you would like to take it to somebody else. I would be happy to answer any questions individually.

Thank you.

(Applause.)

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